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LONDON WONDERS.

It is upwards of two hundred years since Shakespeare remarked that his countrymen were disposed to give more for the sight of a dead Indian than for a living Englishman. Goldsmith, at a later period, in despair for the interests of the literary profession, bitterly sneered at the immense fortunes made by men who could balance straws upon their noses, or cut three capers in the air without touching the ground.* It is not very philosophical, we suspect, to point satire of this kind exclusively at the English, for an avidity for wonders is a constituent element of the human mind, and one which seems to be developed in tolerably uniform proportions among all nations. There is certainly, nevertheless, a simplicity in the English character—perhaps a part of their noble straightforwardness—which makes them more liable to be imposed upon, through the medium of their sentiment of wonder, than most other nations. Even in their largest cities, where more mercantile acuteness and intelligence are shown than in any other part of the world, the people are found to fall a very easy prey to those who address this faculty. Hence the multitude and the success of a number of ridiculous exhibitions, which the least reflection might show to be deceptive, from their inconsistency with the order of nature, but which nevertheless, even when detected and denounced, are always sure of another favourable reception in the course of a few years.

One of the most successful of these absurd wonders is known by the popular title of the Pig-Faced Lady. At intervals rarely exceeding twenty years, some cunning rogues trump up a story of "a lady of family and fortune residing in one of the principal squares, who, with charms of form superior to others of her sex, endures the mortifying drawback on her accomplishments, of having the face of a pig. This dreadful misfortune, as it may well be supposed, has a serious effect on her spirits; she has hitherto passed her life in melancholy seclusion, though such is her natural pride of birth that she will take her food in no other manner than from a silver trough!" Mark the air of refinement given to the object of the fiction—"she will only feed from a silver trough!" The narrative of the pig-faced lady being extensively circulated and supported by its originators, the public appetite gets daily more and more keen. Nothing is spoken of but the wonderful lady with the face of a pig. Where does she stay? What is her name? Can any body say how she is to be seen? Now is the moment to strike the lucky blow. Some fine morning the walls are instantaneously covered with placards announcing the eagerly anticipated fact, "that the pig-faced lady, having heard of the curiosity of the public on her account, in order to relieve the melancholy dullness of her existence, has at length consented to allow herself to be exhibited. She at the same time takes the opportunity of expressing her grateful thanks for the commiseration that had been shown towards her under her most afflicting calamity—a calamity which, alas! has shut her out from the solacements of society, and left her no other means of mingling in the company of her fellow-creatures, than under the character of a public spectacle." One would imagine that this was going a little too far. No such thing. The placard is read with avidity, and crowds rush to the place of exhibition—some to gratify their appetite for the wondrous, some on the pretence of seeing how the hoax is managed. In reality, the pig-

faced lady is neither more nor less than a young bear, well-shaved, fashionably dressed in female attire, and trained to sit demurely and go through a few tricks. When a sufficient number of persons has been admitted, a curtain is drawn, and the unfortunate gentlewoman is seen sitting at a table with music-books before her. The keeper approaches and addresses her in a tone of respectful tenderness, informing her that a number of ladies and gentlemen have come to offer her their condolences. She looks round, rises from her seat, puts a handkerchief to her eyes, and, gently bending to the spectators, sits down once more with crossed hands (paws) and dejected mien, as if conscious of the deformity with which she has been afflicted. Few of course are deceived by this farce; but all allow that it is well got up, and go away, apparently contented with being duped ingeniously.

The Mermaid is another of the periodical wonders catered for the sight-seers. The handbill which last announced such an exhibition, was addressed, in large letters at the top, "To the Lovers of Nature," and proceeded to narrate several interesting particulars respecting both the head and tail of the extraordinary creature, the place where and the manner in which she was caught, and other surprising circumstances "too numerous to mention," concluding with an assertion that this singular work of nature, which formed the connecting link between the human and finny tribes, had been examined, with astonishment and delight, by several of the most eminent naturalists of the age. This was altogether irresistible. The mermaid was immediately visited by multitudes, with heads full of all kinds of wild notions, some bent on inspecting the fins and tail, some eager to see her swim, and others very anxious to behold her performing her toilette with her far-famed mirror and comb. And what did they see for their money? In a room darkened so as to admit the light through an upper portion of one of three windows, the object of curiosity was placed in the centre, within a railing, to prevent her being handled by the vulgar, as the proprietor said. It was about four feet in length from head to tail, the eyes large and brilliant, the snout broad, the mouth large and awry, the arms long and slender, the body hairy to the lower extremity, where a surface of scales commenced, which terminated in a fish's tail. The showman, with the greatest effrontery, told the gaping crowds that it had not been long dead; that it was intended as a present to the king, to grace the celebrated lake near Windsor, called Virginia Water; and that the prime minister wept when he heard Miss Mermaid had breathed her last. This, he said, was for him a most unfortunate circumstance, since it had deprived him of an appointment from the first lord of the admiralty to cruise in the latitudes where she was found, in search of a Merman, so as to perpetuate the species snugly at home. The confidence with which all this was uttered, was intended to draw the attention from close inspection of that which was half monkey and half salmon. The hairy body and scaly tail, however, were cleverly connected, and the suture was not readily to be discovered. In a short time a scoffing newspaper paragraph caused the exhibition to be closed rather suddenly, but not until a very considerable sum of money had been drawn from the searchers after the marvellous.

The Perpetual Motion, exhibited some years ago, created a considerable sensation. The advertisements were well written, and had an air of scientific sincerity about them, which was apt to impose upon many who thought themselves above imposition. The scientific were respectfully invited to come and pronounce as they found, for, in this extraordinary combination of

simple agents, the motion could not be diminished by any resisting power, and the desideratum for which the mechanical world had so long languished was now patent to all at a shilling a-head—children and servants half-price.

What a discovery! "Pray," said one to another, "have you seen the perpetual motion?" "No; I heard that it stopped yesterday." "Sorry for that; intended taking my wife to-day; wish it had not stopped till to-morrow." Crowds did go to witness this wonderful wonder of wonders—and what did they see? In the middle of a spacious room, was a large octagonal construction, raised upon legs about three feet from the floor. Within the framework appeared a number of slender metallic rods, radiating from a point, and descending at an angle of about forty degrees, till they ended in small flat projections attached to a circle which occupied the interior of the glass case. The whole being suspended or balanced on a perpendicular centre, moved slowly round, impelled by some imperceptible agency.

This exhibition was an object of curiosity for some weeks, and realised no small sum of money; but at length a sly incredulous Scotsman penetrated the mystery. Observing some minute apertures in the inside of the exterior case, he soon satisfied himself that streams of air were admitted thereby, so as to hit the projections at the bottom of the rods, and thus keep the whole in steady rotation.

The perpetual motion stopped immediately and without notice, and it probably will not be possible to get up another with any degree of success for at least a dozen years to come.*

Immediately after the battle of Waterloo, a series of advertisements appeared in the daily papers, inviting the lovers of rare productions of nature to inspect an egg, on which were embossed the words, "WELLINGTON, JUNE 18, 1815." Many particulars were given—even the genealogy of the hen—with probable conjectures as to the cause of such an extraordinary prodigy; and as it was presumed that the bird had presented the world with this egg previously to the victory, there was something so mysterious in the circumstance, that it was well entitled to public investigation, for which sixpence each was demanded. Forthwith the wonder-loving portion of the community filled the exhibition-room, where the object, with due ceremony, was shown round by a well-dressed gentleman-like man, who, while he turned the egg that the letters upon it might be distinctly seen by all, very learnedly expatiated on other natural phenomena in a most edifying style, and with surprising volubility. After occupying all the time of the audience in exciting attention, not to the egg, which he continued to twirl in his fingers, he respectfully bowed and retired, leaving the spectators with their mouths open and their eyebrows on the upper part of their foreheads. They had seen the letters on the egg, and that was enough. During one of the exhibitions, the astonishing shell received a crack! On the following day it became perfect!! This, a young chemist thought, was carrying the joke too far. He therefore took a common egg, upon which he wrote in varnish the

* A perpetual motion was got up a few years ago by a simple Scottish shoemaker, and exhibited in Edinburgh, where it imposed upon some of the most eminent savans. The pretended principle was an alternation of magnetic influences with an interposed substance which neutralised them. In this substance, which the inventor pretended to have discovered, lay the grand secret. But the movement in reality depended on a weight in a neighbouring room, which operated by a cord communicating through the limb of the table. This weight was regularly wound up every night, except Sundays, the wife of the impostor insisting that, perpetual or not, the motion should have a respect for the fourth commandment.

words, "NAPOLEON, JUNE 18, 1815;" submitted it to a strong acid, which soon corroded the untouched surface: when the varnish had been cleared off with spirits of wine, the legend appeared glossy, while the rest of the egg was rough. With this he proceeded to the wonderful egg exhibition-room, where, confronting the one miracle with the other, he overwhelmed the poor showman with shame and confusion. The exhibition suddenly closed, in consequence of the severe indisposition of the proprietor, and the public had another joke for their money.

The present exposure of these wonders will not, it is hoped, be without its effect, either in deterring knaves from attempting such impostures, or in warning others against giving them encouragement. In the metropolis, there are many exhibitions which can never fail to gratify this passion in its rational forms. There are the Zoological Gardens, the British Museum, the Panorama, the Solar Microscope, the Saloon of Arts, and many others, fixed and migratory. With the genuine prodigies of nature, art, and science, thus at command, it must be a morbid appetite indeed which sends well-dressed men and women (not to speak of half-price children) after wonders which bear cheat and lie upon the very face of them.

INFLUENCE OF MENTAL CULTIVATION UPON HEALTH.

[The following is the first of a series of extracts which we propose to insert occasionally in the Journal, from a small volume, recently published in America, by Amariah Brigham, M.D., under the title, *Remarks on the Influence of Mental Cultivation and Mental Excitement upon Health*. We conceive this work to be one of first-rate importance at the present crisis of the social history of both the United States and our own country, where greater exertions are beginning to be made in commercial business, in the business of education, and in the general cultivation of the mind, than have been known at any preceding period, perhaps, of the world's existence. To explain, at such a crisis, the physiology of mental operations, and to warn by such knowledge against the excessive use of the intellectual organs, is a duty in which we are delighted to take a part. It may at first sight be presumed that Dr Brigham strikes at the root of Infant Education; a system of which, as our readers must be aware, we are zealous friends. But in reality the learned American can only be held to have written against the abuses of that most promising means for the regeneration of society. We have always held that the main use of infant schools is to give children good moral habits, not to inform their minds with knowledge; and for this reason, that their regulated intercourse in the play-ground, where they imbibe health for both body and mind, is to be considered as the principal part of infant education. To premature attempts at exercising the mental faculties, or loading the memory, we are as hostile as the most unthinking advocate for the old system; and could we suppose that infant education is inseparable from such errors, we should at once cease to afford it countenance. In the infancy of all systems, errors will arise; and we are far from denying that infant teachers, in their undue anxiety to have something to show, in some instances pay too much attention to intellectual, and too little to moral, culture. But as better views are diffused, such errors must be abandoned. With this protest against the possible misconstruction of Dr Brigham's object, we submit the first portion of his truly valuable work.]

EVERY part of the human system has undoubtedly been created for the performance of some action; as the heart for the circulation of the blood, the eye for seeing, the ear for hearing, the nerves for sensation, the bones to sustain, and the muscles to move the body.

That action which nature intended a certain organ to perform, cannot be executed by another organ; the ear cannot supply the place of the eye, or the nerves perform the duties assigned to the muscles. The particular action or duty assigned to several organs of the body we know by the evidence of our senses. We can see and feel the heart beat and the muscles contract. But as regards the action or function of other organs, we have not the same evidence. We do not see the action by which the liver secretes the bile, nor that by which the eye conveys to us a knowledge of outward things, and of their different colours. We do not know, from the evidence of our senses, that any action at all is excited in these organs to produce such results; still we are confident that the liver does produce the bile, and that the eye sees. So as regards mental action, we do not, to be sure, witness it. We never see the mind at work. So far as we can discover by our senses, the most profound thoughts of the philosopher, or the finest conceptions of the poet, produce no action of the brain. The mental operation which determined Cæsar to pass the Rubicon, or Napoleon the heights of St Bernard, could not be perceived to increase or change the action of the brain; yet such facts do not force us to believe that the mind acts independently of this organ. We do not doubt that the stomach is in action, when it separates from the numerous articles which compose an epicure's dinner, or from the coarse and simple fare of the Esquimaux, those particles and those only which are nutritious, and appropriates them to the support of the body, although this action cannot be perceived by us. Neither do we doubt the formation of bile from the blood by the liver, as has been hinted, nor the action of numerous other organs of the body, though we can derive no knowledge concerning their operations through the senses: they are just as mysterious to us as the manner in which the brain modifies thought by its action.

The brain is one of the largest organs in the body: it is better supplied with blood than any other, and is better protected. These facts show that nature designed it to answer very important purposes; and unless it is the organ by which mental operations are performed, there is but little for it to do, and that little comparatively trifling. That it is, however, the material organ of all the mental faculties, scarcely, at this period of science, requires to be proved. To discipline the mind, means, therefore, to call into regular and repeated action certain portions of the brain, and to enable them to manifest easily and powerfully certain mental operations: this process is like that of exercising other organs of the body, thus giving them increased facility in the performance of their respective functions.

There is much proof that the brain consists of a congeries of organs, each of which, in a healthy state, manifests a particular faculty of the mind, and that the power of each faculty chiefly depends on the size of its appropriate organ. I allude to these facts, however, only for the purpose of directing the inquiries of others to them. My present aim is simply to show that the brain, considered as a whole, is the instrument by which the mind operates; and I hope to impress this fact deeply upon the minds of all those who are engaged in the education of youth.

As a first proof, I will refer to that belief in the dependence of the mind upon a sound state of the body, which is forced upon us by almost daily occurrences. We see that severe blows upon the head are followed by an entire deprivation of intellect; sensation and volition are destroyed, at the same time no part of the system is injured but the brain, and the action of other organs goes on as usual. When a person is thus, by a blow or by a fall, deprived of his reason, the bystanders, by an instinctive impulse, look to the head to find the injury. No one ever supposed that an injury of the hand or foot will affect the mind and derange its operations, but all uniformly expect such a result when the brain is wounded; and this general expectation is founded upon observed facts.

Insanity furnishes further evidence that the brain is the organ by which the mind acts; for this is not a disease of the immaterial mind itself, but of the brain, and often resulting from some injury. Such a diseased state of the organ of the mind, of the very instrument of thought or of some part of it, deranges the intellectual faculties, just as a diseased state of the stomach deranges digestion. The immortal and immaterial mind is in itself surely incapable of disease, of decay and derangement; but being allied to a material organ, upon which it is entirely dependent for its manifestations upon earth, these manifestations are suspended or disordered when this organ is diseased.

If the mind could be deranged, independently of any bodily disease, such a possibility would tend to destroy the hope of its immortality which we gain from reason; for that which is capable of disease and decay may die. Besides, it would be natural to expect that mere mental derangements might be cured by reasoning, and by appeals to the understanding. But attempts to restore the mind in this manner generally prove useless, and are often injurious; for insane persons feel that their understandings are insulted whenever opposition is made to their own hallucinations and to the evidence of their senses. It is fortunate for them that the true nature of mental derangement has of late been acknowledged in practice, and that in all attempts to benefit and cure this unfortunate class of beings, they have been assigned to the physician, and treated for corporeal disease.

The phrase *derangement of mind*, conveys an erroneous idea; for such derangement is only a symptom of disease in the head, and is not the primary affection. It is true, that moral and mental causes may produce insanity, but they produce it by first occasioning either functional or organic disease of the brain. On examining the heads of those who die insane, some disease of the brain or its appendages is generally found. I am aware of the statement by many writers, that they have examined heads of the insane, and found no trace of organic disease. But until late years, there has not usually been great accuracy in such examinations, and slight organic disease might have been overlooked. Even admitting that there was no organic disease in the cases described by these writers, there was undoubtedly functional disease inappreciable by the senses; just as there is often great disorder of the stomach and derangement of digestion which cannot be discovered by dissection. There are in fact no diseases which are independent of affected organs, although the affection may not always be evident to the senses.

Although mental derangement may perhaps sometimes occur in individuals who after death exhibit no trace of organic disease, I think such cases are more rare than has generally been supposed. Dr Haslam says that insanity is always connected with organic alterations of the brain. Greding has noticed thickening of the skull in one hundred and sixty-seven cases out of two hundred and sixteen, besides other organic disease. Spurzheim says he always found changes of structure in the heads of insane people. M. George dissected a great number of brains, and his experience is conformable to that of the authors above mentioned. Mr Davidson, house surgeon to the Lancaster County Lunatic Asylum, examined with great care the heads of two hundred patients who died in the asylum, and he scarcely met with a single instance in which traces

of disease in the brain or its membranes were not evident, even when lunacy was recent, and a patient died of a different disease.

Dr Wright, of the Bethlehem Lunatic Hospital, states, that in one hundred cases of insane individuals, whose heads he examined, all exhibited signs of disease; in ninety cases the signs were very distinct and palpable; in the remaining ten they were fainter, but still existed in some form or other—such, for instance, as that of bloody points, when the brain was cut through.

One of those writers for the prize offered some years ago by the celebrated Esquirol, for the best Dissertation on Insanity, observes, that he examined the heads of more than one hundred individuals who died from insanity, and comes to the following conclusions:

- 1st, That in the brains of those who die of insanity, changes of structure will always be found.
- 2d, That these changes are the consequences of inflammation, either acute or chronic.
- 3d, That there exists a correspondence between the symptoms and the organic changes; and that the names monomania, mania, &c. ought only to be employed as representing degrees and stages of inflammation of the brain.

These references to the intimate connection between insanity and disease of the brain have been made, because I propose to show hereafter, that whatever strongly excites the mind or its organ, whether it be study or intense feeling, tends to produce this awful calamity. I shall proceed now with additional evidence that the brain is the material organ of thought.

This appears then farther, from the fact, that pressure on the brain suspends all the operations of mind. If a person receives a blow upon the head which depresses a portion of the skull upon the brain, his intellect is suspended or deranged until such pressure is removed. Cases like the following are not uncommon. A man at the battle of Waterloo had a small portion of his skull-bone beat in upon the brain, to the depth of half an inch. This caused volition and sensation to cease, and he was nearly in a lifeless state. Mr Cooper raised up the depressed portion of bone from the brain, and then the man immediately arose, dressed himself, became perfectly rational, and recovered rapidly.

The following case occurred in Hartford, within a few weeks:—H. O., a young man, fell in the evening through the scuttle of a store, and arose immediately, mentioned the fall to some of his acquaintance, and transacted business during the evening. Next day he was found in bed in nearly a senseless state, and soon became incapable of speaking, hearing, seeing, or swallowing, and appeared to be dying. There was no evidence of any fracture of the skull, and but very slight appearance of any external injury whatever. A small swelling over the right ear, and the conviction that he could live but a few minutes in the state in which he then was, determined his medical advisers to perforate the skull.

I removed a small portion of the bone beneath the slight swelling over the ear, by the trephine, and found more than a gill of clotted blood, which had probably flowed gradually from a wounded blood-vessel. On removing this blood, the man immediately spoke, soon recovered his mind entirely, and is now, six weeks after the accident, in good health, both as to mind and body.

Richerand mentions the case of a woman whose brain was exposed, in consequence of the removal of a considerable portion of its bony covering by disease. He says he repeatedly made pressure on the brain, and each time suspended all feeling and all intellect, which were instantly restored when the pressure was withdrawn. The same writer also relates another case, that of a man who had been trepanned, and who perceived his intellectual faculties failing, and his existence apparently drawing to a close, every time the effused blood collected upon the brain so as to produce pressure. Professor Chapman, of Philadelphia, mentions in his Lectures, that he saw an individual with his skull perforated and the brain exposed, who was accustomed to submit himself to the same experiment of pressure as the above, and who was exhibited by the late Professor Wester to his class. His intellect and moral faculties disappeared, on the application of pressure to the brain: they were held under the thumb as it were, and restored at pleasure to their full activity, by discontinuing the pressure.

But the most extraordinary case of this kind within my knowledge, and one peculiarly interesting to the physiologist and metaphysician, is related by Sir Astley Cooper in his *Surgical Lectures*.

A man, of the name of Jones, received an injury of his head, while on board a vessel in the Mediterranean, which rendered him insensible. The vessel, soon after this accident, made Gibraltar, where Jones was placed in the hospital, and remained several months in the same insensible state. He was then carried on board the *Dolphin* frigate to Deptford, and from thence was sent to St Thomas's Hospital, London. He lay constantly on his back, and breathed with difficulty. His pulse was regular, and each time it beat, he moved his fingers. When hungry or thirsty, he moved his lips and tongue. Mr Cline, the surgeon, found a portion of the skull depressed, trepanned him, and removed the depressed portion. Immediately after this operation, the motion of his fingers ceased, and at four o'clock in the afternoon (the operation having been performed at one) he sat up in bed; sensation and

volition returned, and in four days he got out of bed, and conversed. The last thing he remembered was the circumstance of taking a prize in the Mediterranean. From the moment of the accident, *thirteen months and a few days*, oblivion had come over him, and all recollection had ceased. He had for more than one year lived wholly unconscious of existence; yet, on removing a small portion of bone which pressed upon the brain, he was restored to the full possession of the powers of his mind and body.

It is curious to notice, that often an injury of the brain impairs only that part of the mental faculties. Such instances give great support to the phrenological views of Gall and Spurzheim, who contend for plurality of organs in the brain, and a separate and peculiar function to each organ, as, one organ for comparison, another for language, another for tune, &c.

Dr Beattie mentions the case of a learned man, who, after a blow on his head, forgot all his Greek, a language he was well versed in before the injury. His mind and memory were not affected in any other respect. Another person, mentioned by Dr Abercrombie, lost all recollection of his having a wife and children, for several days after a similar injury, while his memory of the accident and of recent circumstances was perfect.

Sir Astley Cooper mentions, from personal knowledge, the case of a German sugar-baker, with disease of the brain, who, in the early stage of his complaint, spoke English, but, as his disease advanced, forgot this language, and remembered only the German. The same author relates the case of a man at St Thomas's Hospital, who, after a blow upon his head, was found talking in a language unknown to all, until a Welsh woman, who entered the hospital, recognised it as Welsh: the blow upon his head had caused him to forget the English language.

Dr Conolly relates a still more remarkable case of a young clergyman, whose head was severely injured a few days before that on which he was to have been married. He recovered as to his health, and lived until the age of eighty; but from the time of the injury his understanding was permanently deranged, though he retained the recollection of his approaching marriage, talked of nothing else during his whole life, and expressed impatience for the arrival of the happy day.

But we see analogous affections resulting from fevers, and other diseases which affect the brain. Dr Rush says that many of the old Germans and Swiss in Pennsylvania, who had not spoken their native language for fifty or sixty years, and who had probably forgotten it, would often use it in sickness; and he explains it by supposing that the stimulus of the fever in their brains revived their recollection.

He refers also to the case of an Italian, who was master of the Italian, French, and English languages, but who, in a fever which terminated his life in the city of New York, spoke English in the commencement of his disease, French only in the middle, and on the day of his death Italian.

Numerous cases are related, of persons who, from disease affecting the brain, forget names and events, times and places, but retain a perfect recollection of persons and numbers. As like symptoms arise from blows on the head, and often from fevers, we cannot doubt that the brain is very similarly affected in both cases. Insanity is known frequently to arise from blows on the head, and fevers often make people insane for years, who are suddenly restored to the full possession of their mental powers, just as Jones was restored by trepanning, after remaining a year in an insensible state.

Numerous instances similar to those which I have related are found in works on mental derangement, and they all tend to prove that a well-developed and sound brain is absolutely necessary for correct and powerful operation of the mind. Many of them are exceedingly interesting, and very difficult to explain, except on the ground adopted by Gall and Spurzheim, and eloquently developed and illustrated by Messrs Combe.

These writers divide the intellectual faculties into two classes—the *knowing* and the *reflecting*. The knowing faculties are *individuality, form, size, weight, colouring, locality, order, time, number, tune, and language*; the reflecting faculties are *comparison and causality*. Each faculty has a separate and material instrument or organ in the brain, and memory belongs to each faculty: hence there are as many kinds of memory as there are organs for the knowing and reflecting faculties. They say, moreover, that memory is only a degree of activity of the organs: hence from disease or other causes, increasing the activity of the organs, the recollection of things is far more vivid at one time than at another. This enables us to explain those cases that frequently occur, in which, from some injury of the brain, a person loses the memory of words, but retains that of things. Dr Gregory mentions the case of a lady, who, after an apoplectic attack, recovered her recollection of things, but could not name them; others forgot the names of their most intimate friends, whose persons they perfectly recollect. I have a patient at the present time, whose memory is good as respects every thing but places: he recollects perfectly, persons, names, events, &c., but does not recollect his own or his neighbours' houses, or the place in which he has resided for many years.

Further proof of the connection between the state of the brain and that of the mind, might be adduced from

the many instances of idiots and cretins, who are all nearly destitute of intellect, and defective in the organisation of their heads. There have been many examinations of the heads of such individuals, says Esquirol, and they have usually been found to be of vicious formation. The same writer adds this important remark, "that idiots and cretins sometimes manifest great intelligence in early life, and give promise of possessing superior mental powers; but these premature beings soon become exhausted, their intellects remain stationary, and the hopes they excited soon vanish."

The general proposition which I wish to establish, is made evident, also, from the fact that whatever excites the mind, excites and stimulates the brain.

This we know from experience in a severe headache. We perceive the pain to be increased by intense study or thinking, and that mental application determines more blood to the head. So true is it that mental excitement produces an increased flow of blood to the head, that surgeons are very careful to preserve a quiet state of mind in those whose heads are wounded. Sir Astley Cooper, speaking of such injuries, says, that if any mental power remains, all excitement of the brain should be avoided; and relates the following case. "A young gentleman was brought to me from the north of England, who had lost a portion of his skull just above the eyebrow. On examining the head, I distinctly saw the pulsations of the brain, which were regular and slow; but at this time he was agitated by some opposition to his wishes, and directly the pulsations of the brain were increased, and became more violent, and more blood rushed to the brain. If, therefore, you omit to keep the mind free from agitation, your other means will be unavailing in the injuries of the head."

The same author mentions another similar case; that of a young man, who had an opening in his skull from a wound, through which he could see an increased action in the brain, whenever any thing occurred, even in conversation, to agitate the mind of the patient.

The following case is related by M. Broussais. M. Thavernier, a captain in the —— regiment, forty-two years of age, moderately stout, but well formed, received, in the middle of the Palais Royal, in May 1815, ninety days before his death, a letter containing bad news. Whilst perusing it, he remained motionless as if thunderstruck, and the left side of his face became paralysed, and drawn to the opposite side. He was taken to Val de Grace, and attended to. At this time he had complete paralysis of the arm, thigh, and leg of the right side, and was unable to speak. After using various remedies for more than two months, he began to improve, and became so much better as to be able to stand up, and to speak, although with difficulty.

In this state of improvement, M. Thavernier received another letter, said to be from his wife: he read it, and instantly there occurred loss of speech, general immobility, abolition of sense, and complete apoplexy. He died in three days after this attack, and on examining the head, there was found engorgement of blood in the sinuses, and several abscesses were observed in the substance of the brain, and other marks of organic disease. M. Broussais considers this a case of chronic inflammation of the brain, induced by a moral cause.

The same general fact, that mental excitement stimulates the brain, is proved by numberless cases,

and forms the basis of correct treatment of diseases of the brain, and especially of insanity.

This disease is generally produced by morbid excitement of some portions of the brain, and requires for its cure that this disordered organ should be left in absolute repose. Hence arises the benefit of asylums for lunatics, where this unhappy class of persons have no care, no wants to provide for, and where their minds are not excited, but soothed by kind words and gentle and affectionate treatment.

Sometimes the increased flow of blood to the head is such as wonderfully to increase the powers of the mind. Pinel, and other writers on insanity, relate cases of patients, who possessed but weak minds when in their usual state of health, but who exhibited very superior powers of intellect during paroxysms of insanity, which determined more blood to the head than ordinarily. Similar facts I have noticed in the insane: sometimes the memory seems to be wonderfully increased; at other times, imagination, or wit, &c.; and thus many of the insane are supposed to possess uncommonly brilliant mental powers.

I might adduce many more cases to prove the very intimate connection between the brain and the mind; that it is a defective brain which makes the idiot, and a diseased brain which causes delirium and insanity; and that all the various states of mind produced by alcohol or by opium, &c. arise from the disordered action which these articles produce in the brain; that the weak mind manifested by the infant, and the feeble mind by the aged, are produced by a small and undeveloped, or an enfeebled and diseased brain, and not by a change of the immaterial mind itself. But cases enough have been cited to prove these truths. And if we do admit that the brain is the organ by which the mind acts, we must acknowledge the necessity of guarding this organ most carefully, of exercising it with extreme caution, of not endangering its delicate structure at any period of life by too much labour, or preventing its full development by too little; for the regular exercise of all the organs of the brain is necessary

to prepare them for the active and powerful manifestation of the mental faculties.

The healthy condition and proper exercise of the brain are therefore far more important than of any other organ of the body, for we might as well expect good digestion with a diseased stomach, or good music from a broken instrument, as a good mind with a disordered, enfeebled, or improperly developed brain. And yet, how little regard has been paid to these important truths, in the cultivation of the mind! While people are exceedingly fearful of enfeeble and destroying digestion, by exciting and overtasking the stomach, they do not appear to think they may enfeeble or derange the operation of the mind by exciting the brain, by tasking it when it is tender and imperfectly developed, as it is in childhood.

"IT'S MY LUCK,"

AN IRISH SKETCH, BY MRS S. C. HALL.

[Abridged from the *Amulet*, for 1833.]

"WELL, ma'am dear, I never thought that ye're going into foreign parts would make a heathen of ye entirely. To be sure, it turns the mind a little to leave one's own people; but to shift that way against what the whole world knows to be as true as gospel! It's myself that couldn't even it to you, at all, at all—so I couldn't—if I hadn't heard it with my own ears!"

"I assure you, Moyna, you are very much mistaken in imagining that the whole world adopt your notions of predestination, for—"

"I ax ye's pardon for interrupting you, my lady; but I said nothing about pre—pre—I can't twist my tongue round the word."

"Predestination, Moyna, means what you call Luck—a thing you believe you cannot avoid—a sort of spirit that deals out to you good or evil, in defiance of your own wishes." Moyna looked puzzled—exceedingly puzzled: she knocked the ashes out of her pipe against the post originally intended to support a gate, which, according to Moyna's reading, "her luck" had prevented from being either made or hung; and, stuffing her middle finger into the bowl of the little puffing medium, so as to ascertain that no hidden fire remained in its recess, she returned it to her pocket—clasped her hands so as to grasp the post within their palms, and, leaning against it, one foot crossed over the instep of the other, she turned her head a little round, and called to her husband by the familiar but affectionate appellation of "Tim a vourneen!"

"Tim"—or, to speak correctly, Timothy Brady—made his bow from beneath the roof of a picturesque but most comfortless sheeling—a cottage that would have looked delightful in a painted landscape—a matter essentially different from a delightful cottage in reality. Nothing could be more beautiful than the surrounding scenery: wood and water—hill and dale—a bold mountain in the distance—blue sky over head—the turrets of a lofty castle shining among the woods—and the lawns and shrubberies of another, extending to the little patch of common, on which seven or eight huts, similar in appearance to my poor friends' dwelling, were congregated.

Timothy Brady differed in nothing from the generality of his countrymen, except that he was "better learned," for he could read and write, and, when a lad, was in great esteem as a "mass server," and noted as being "remarkable handsome at the altar." I had not seen him for some time, and was struck with the painful change which a few years had made in his fine athletic form. Moyna had ever been a careless, affectionate "slob of a girl," who would "go from Bantry to Boyne to serve me on her bare knees," but had little idea of serving herself. Such a character is not improved by age; but there was a time when I had hoped a better fate for Timothy. His sunken eye became bright and animated when he saw one who had rendered him some service, and he pulled up his stockings over his bare legs, with that striking regard to propriety which an Irish peasant rarely forgets in the presence of a female. After the usual civilities had passed, Moyna commenced—

"The lady's at me agin about the luck, and now, may be, she'll have the goodness to say what she said awhile ago." "I told your wife that Predestination is what she calls Luck, and that she would agree very well with the Turks."

"The Turks!" repeated Moyna, throwing up her hands and eyes in horror. "Oh, ma'am, honey—I never thought you'd even the Turks to one of your own country! Oh, Tim, Tim! was I like a Turk when I sat by your bed, night and day, while ye had the typhus fever? Was I?"

"Moyna, will ye whisth, woman dear!—you have no understanding; the lady only meant that you and the Turks had different names for the same thing. Wasn't that it?" I bowed and smiled.

"Was that it? Och, bother!—to be sure we have different names. I ax ye's pardon, but I think ye said I'd agree with the Turks."

"Yes, good Moyna, in one thing; you believe in 'luck,' and so do they." Moyna was appeased, and Timothy took up the matter.

"There's no denying luck, nor no going against it, lady dear, that's the short and the long of it. It's my luck never to make as much by any thing as another. Why the bonnie we reared from the size o' my hand, that Dorney Cobb offered me any money for at Candlemas, caught could and died at Easter—sorra a man on the common had the luck to lose a pig but myself!"

"How did it catch cold?"

"Out of nothing in the world but my luck; it was used, poor thing, to sleep in the cabin with ourselves, as the sty had no roof: but a neighbour's child was sick, and my woman axed some of the family in, and the pig was forced, out of manners, to give up his bed, and sleep in the sty, which, as it had no roof, let in the rain. And it was mournful to hear the wheezing he had in the morning, and to see him turn his back on the pick of the mealy potatoes just before he died."

"Well, Timothy, I should call that mismanagement; I do not see either good or bad luck in the case; for it is clear that, if the sty had been roofed, the pig would not have been accustomed to cottage warmth, and, consequently, could not have caught cold."

"Well, lady, listen—it was my luck entirely that hindered my roofing the sty. I'll tell ye all about it. Did ye know Tom Dooly?—sorra a hand's-turn he'd do from Monday morning till Saturday night, barring the height of mischief. Ye didn't know Tom?—well, ma'am, I'm sure you mind his brother Mickey—'One-eyed Mick,' he was called, because he is good as lost the other in a bit of a spree at the fair of Rathmullin, and could get no justice for it." "No justice for the spree, do you mean, Timothy?"

"No, ma'am; I mean no justice for his eye; clearly proving there's no law for the poor—God help them! The boy he fought with was as good as thirty years older than himself, a tough ould fellow, with a crack-stick skull that nothing could harm. So Mick know'd that, and he never offered at the head, but the shins—which he broke as complete as any thing you ever saw. And so the magistrate set the ould boy's shins against Mickey's eye, and bid them make it up. Ah! there's no law for the poor, at all, at all!" "No justice for the pig-sty."

"Troth, yes," returned Tim, "though I'm sorry to take a lady to such a subject. Tom Dooly says to me, says he, 'Tim, ye're in want of a lock of straw to keep the heavens out of the piggery.' 'I am,' says I. 'Well,' says he, 'come over to me; I've a lot of as fine barley straw as ever danced under a fail, and ye shall have it, just for that ye.' 'God bless ye, and good luck to you and yours, Mister Tom,' says I, 'good luck to you and your's for ever and ever, amen!' 'And when 'ill you look over for it?' says he. 'To-morrow, for certain,' says I. 'Very good—to-morrow by all means,' says he, 'and make my respects to the woman that owns ye.' Now, ma'am dear, mind the luck; something or other hindered Moyna from taking my brogues, to be mended, to the brogue-maker's that night. So I couldn't go the next day, and that very evening a great splinter ran into my foot out of the spade-handle."

"Stop, my good friend; if the spade handle was splintered, why did you not mend it?"

"Ma'am dear, that was a way you had, ever and always, tripping a body up in their story. Sure I did mend—that is, I eased it with a bit of a cord. But it was my luck hindered me, and the bad foot, from going the day after that; and one thing or another came across me, until it was a week before I could go for the straw. Well, the black boy himself put it into my head to borrow Matthew Maccaan's white mare. 'Take her and welcome,' says Matty; 'but mind, if you put yourself or any thing else on her, she'll kick till she smashes every bone in your body, though she'll draw a creel or a cart.' 'Thank ye kindly, Matthew,' says I; 'I'll mind fast enough,' and away I went. And at his own gate I saw Tom, as grand as Cromwell, with his hands in his pockets, and a silk Barcelona round his neck, like any gentleman. To be sure the luck of some people! 'Good evening, Tim,' says he. 'Good evening kindly,' says I. 'Where are you going with Matthew Maccaan's beast?' says he. 'No farther than this,' says I, 'until I go home again.' 'I'm always glad to see an ould friend,' says he; 'but why didn't ye come,' says he again, 'for the barley straw?' 'Sure I'm come for it now,' says I. 'You are!' says he, opening his great grey eyes at me, like a wild cat; 'sorra as much for ye, then, as would build a sparrow's nest,' says the traitor: 'If ye'd been glad of it, you would have come when you was bid to come, and not let a whole week rowl over your head. I gave the straw to Jemmy Hatchet, and by this time it's no straw, but a root, and a good one too, to his sty, and his neat clean barn.' 'It's ill done of ye,' says I, as cool as a cabbage-leaf, though my blood was boilin' at the ill luck that follows me; 'ye might have waited; but never heed,' and I turned the horse round to come home. 'Sure,' says he, 'ye're not going to stir ill-blood out of the offer I made ye from kindness; if ye did not take advantage of it, it was your fault, not mine.' Well, I didn't value the straw a traneen, ma'am dear; I've a spirit above it; but I did not like his bestowing his dirty straw upon Jemmy Hatchet: so I makes answer, 'Do you say I'm in fault?' 'To be sure I do,' he says, with a grin of a laugh. 'Then by this, and by that,' I says, swearing a great whale of an oath, that I'd be sorry to repeat before a lady, 'I'll make ye eat both ye'r words and the straw.' 'Ye can't,' says he; 'and what's more, ye dar'n't; an't I the priest's neph'?' Well, that would rouse the blood of a wood quest, for it was cowardly-like; and, as my luck would have it, I hit him an unlucky blow; and a dash of sorrow it got me into; for I had the world and all

of penance, to say nothing of being had up, and he swearing he gave no provocation. For sartin I didn't mean to have struck so hard, and didn't think his bones were so soft. But that wasn't all of it—going home, the trouble of what I had done uppermost, I forgot what Mac said about the horse, and got on the baste's back, who made no more ado but kicked and plunged, and pitched me into the thick of a pond full of young ducks and geese; and two ganders set upon me, and as good as tore the eyes out of my head, before I could get out of the water; and I had to pay two and three-halfpence for the young that was killed in the scrummage. And well I know it's long afore such luck would have followed any other boy in the parish but myself. Now, ma'am dear, isn't that luck?"

"Is your story finished, Tim?"

"It just is, ma'am, darlant—that is, I mean the sty story is finished; but I could tell ye twenty as good, and better too, to show what ill luck I have."

"There is no luck, ill or well, that I can see, from beginning to end. Your misfortunes entirely arose out of your want of punctuality; had your shoes been mended, as they ought to have been, you could have gone for the straw with comfort on the evening you were desired. Still, their not being mended was no excuse for your want of punctuality. You put me in mind of an anecdote I heard once of two Irishmen, who were too lazy to pluck the figs that hung over their heads in a beautiful garden in Italy. There they lay on their backs, beneath a tree covered with fruit, their mouths open for the figs to fall into. At last a fig, by what you would call 'luck,' fell into the mouth of one of these Irishmen. 'What a lucky dog you are, Paddy!' said the other, opening his great mouth still more widely. 'I don't know that, Looney,' replied Paddy, after swallowing the fig, 'for I have had the trouble of chewing it!'"

"Agh, ma'am, honey! I wonder how you have the heart to tell such stories against your own country; letting the foreigners laugh at us that way."

"Listen, Timothy; how would your own case read? Timothy Brady was indicted for an assault upon Mister Thomas Dooly, who swore that he told the aforesaid Timothy Brady, that, if he came to him on the evening of the first of May, he would make him a present of a load of straw to thatch his pigsty: that Brady promised to come, but never came until the seventh of May; and in the meantime he, Thomas Dooly, thinking that Brady did not wish to thatch his pigsty, had given the load of straw to an industrious man who did thatch his pigsty; that when Brady found the straw had been given, he, without any provocation—"Oh, easy, ma'am dear! you forget the laugh."

"And who could help laughing?—without any provocation did assault the said Thomas Dooly." Now is not so, worthy Timotheus?"

Reasoning with the Irish on this same subject is pretty much like attempting to swim against the stream of a powerful river. You catch some little turn or current, and you think you have them there. No such thing. Away they go the next minute.

Moyna now took up the subject. "Sure, ma'am, you must allow that what happened to Milly Boyle was luck! Poor thing!—she'd as bad luck as her neighbours, and worse too, but she could not go past what was before her."

"Milly Boyle—I remember her—a blue-eyed, fair-haired girl."

"With rosy cheeks, and a smile ever ready to coax them into dimples. Ah, ma'am! she was the pride of the whole village. And her poor mother (and she a widdy) doated on her as mother never doated on child before or since, to my thinking. Then her voice was as clear as a bell, and as sweet as a linnet's; and though she had forty pounds to her fortune, besides furniture, a feather-bed, and a cow, to say nothing of the pigs, and powers of fowl, and lashings of meal and cutlings (sure her uncle, big Larry Boyle, is a miller)—though she had all them things, she was as humble as a wild violet, and to the poor was ever ready with a soft word, and a 'God save you kindly,' and her hand in her pocket, and out with a fivepenny bit, or a taster; or would think nothing of lapping her cloak round her, and away to any sick woman, or poor craythur of a man that 'ud be ailing, and give them the grain of tea, or the bit of tobacco, or taste of snuff, to comfort them; and the prayer of the country side was, 'Good luck to Milly Boyle!' To be sure if she hadn't the bachelors, no girl ever had. Shoals of 'em watching for her coming out of chapel, or from the station, or the wake, as it might be, waylaying her, as a body may say; and though she was main civil to them all, and smiles were as plenty and as sweet with her as harvest-berries, yet it was long before she laid her mind to any, until her fancy fixed on Michael Langton, one of the best boys in the barony; handsome and well to do in the world was Michael, and every one was rejoiced at her luck. Well, the day was fixed for the wedding; and even the poor mother thanked God on her knees. And the evening before, Michael and Milly were walking down by the river at the bottom of the common, and Milly spied a bunch of wild roses hanging over the stream, and she took a fancy to the flowers; and to be sure Mike made a spring at them, but his luck took the footing from under him, and the poor boy was drowned in the sight of her eyes. But the worst of the woe is to come; she got a brain fever out of the trouble, and the fever scorched up her brain, so that there was no sense left in it, though her heart was as

warm as ever; and then she used to go rambling about the country, with her hands crossed on her breasts, and her eyes evermore wandering; and if she'd hear a cry or a moan, she'd run to see if she could do any thing to lighten the trouble, and yet she had no sense left to know how to set about it. And oh, ma'am dear, the mother of her!—to see that poor woman fading away from off the face of the earth, and following her as if she was her shadow!—'twas the hardest luck I ever knew."

"And what became of poor Milly?"

"The worst of luck, if it's as long as a midsummer day, must have an end—and so, ma'am dear, Milly died. And it was quare, too, she was found dead under a wild rose tree—I often heard they were unlucky things—there she was, and I heard them that found her tell, that it was a beautiful melancholy sight to see her—her cheek resting on her arm as if she was asleep, and ever so many of the rose-leaves scattered, by nature like, over her white face!"

"And her mother?"

"Ah, ma'am, they say ould hearts are tough! but if it's true, sorrow can tear them to pieces—the two were buried in the same grave."

Moyna's story moved me much; I wished them both a kind good Morrow, and had nearly arrived at the village where we lodged, when, panting and breathless, she overtook me.

"What's the matter, Moyna?"

"Oh, the man has the toothache so bad that I'm forced to run for a pipe; the smoking does it good."

"What! has he not a pipe?" "He had, ma'am, but he lent it to Briney Moore." "But I saw you put a pipe in your pocket not twenty minutes ago."

"So you might, ma'am dear; that's my luck; it would have staid quiet and easy in any body else's pocket, but there was a hole in mine; so it walked out, and broke, without so much as by ye're leave."

"Why did you not mend the hole?"

"Ah, ma'am, honey, if I did, it would break out again," said Moyna, with some impatience of tone and gesture. "Where's the good of mending any thing, when we've no luck?"

Poor Moyna! she would have been very angry had she known that I again compared her to the Turks, and was more than ever satisfied that, till belief in fatalism is rooted out, poor Ireland will "have no luck!"

SCRAPS FROM THE PORTFOLIO OF A NATURALIST.

IT has been often asserted that a lover of natural history cannot be a bad man, an opinion to which I heartily subscribe. The everlasting hills, the majestic forest, the boundless ocean, draw our thoughts from nature up to nature's God; and whether we gaze at the sun which cometh forth as a bridegroom out of his chamber, or at the meanest insect which sports its little day, and is gone, all bear the mighty impress of His hand, who created the heavens and the earth, and upholds them by his power.

Let all, then, who have a taste for natural history, cultivate that taste in the full assurance that he will be richly rewarded for his labour. I do not by any means join in the sentiment of the French countess, who declared "she toils at innocent pleasures." On the contrary, I would recommend the cultivation of innocent pleasures as one of our best defences against the indulgence of those of an opposite tendency. I therefore earnestly recommend all those who have leisure, and an occasional vacant hour to fill up, to devote a little of their time to the study of the interesting objects by which they are surrounded.

The man who can find pleasure in watching the wonderful operations carried on in a bee-hive, will not be reduced to have recourse to the gaming-table for amusement; and he who is familiar with the haunts of the eagle, who loves the morning song of the lark, who delights to watch the return of the rooks to their nests, to gather the dew-sprinkled heath, or to nail the trailing woodbine on the porch, will find he has pleasures within his reach which the votaries of dissipation and folly must never hope to taste. But, above all, I would endeavour to impress on the minds of parents the vast importance of teaching their children those branches of the study referring to the animal creation, as tending materially to root out that cruelty which, springing from our depraved nature, is so often to be observed in children, and never without regret and apprehension; for when we reflect that "the boy is father to the man," we shall then see the necessity of checking propensities which, if overlooked in youth, will invariably lead to misery and ruin.

Cats are a much traduced race. Their ingratitude is held up to public odium, and the generality of people will not allow that a cat can possess a single virtue. I cannot agree in this opinion. I have seen cats show a great deal of sensibility, yes sensibility,

and give proofs of attachment and gratitude for kindness, of which the following is one of the many instances that have come under my observation:—Mrs A. had a cat of which she was very fond, and whose dinner was provided with as much regularity as that of any member of the house, by the cook bringing home a liver once a week when she went to purchase provisions for family use. When the liver was brought home, it was cut into seven pieces, and puss had each day her allotted portion. It so happened that Mrs A. was taken ill and confined to bed. No sooner did the cat miss her kind friend, than she made her way to Mrs A.'s chamber, and, jumping on the bed, she caressed her mistress, licking her face and hands, and expressing by every means in her power her sympathy and affection. After a time, the cat became restless; she leapt from the bed, planted herself close to the door, and waited with evident impatience till it was opened. The moment this was done, she ran down stairs, and, to her mistress's great surprise, she returned immediately with a piece of liver in her mouth, which she laid on the bed, and seemed to solicit her to eat; thinking, perhaps, that she was suffering from hunger. The gratitude of puss did not end here; for on the next market-day, when the cook brought in the liver, ere she had time to divide it, puss slyly seizing the opportunity when her back was turned, pounced upon the liver, rushed up stairs with it, and laid it on the counterpane with evident marks of pleasure, and with gestures which seemed to say, "See what a fine dinner I have brought you; pray get up and eat it."

Every one has heard that a worm will turn when trod on, but few persons perhaps are aware that there may be provocation so great as to rouse the choler of the proverbially meek and gentle lamb, and that he is not only susceptible of feeling resentment against injuries, but that, when circumstances require it, he can boldly assert his rights; nay more, that he can even inflict chastisement when he thinks it deserved. No one will doubt this fact after perusing the following anecdote of Bobby—a strange name, by the way, for the hero of a tale, but which was probably conferred on him as being expressive of his peculiar qualities, which were by no means those of meekness and forbearance.

The commencement of Bobby's story is rather of a sentimental cast, seeing that he became an orphan at his birth. Being deprived of maternal care, the gentleman to whom he belonged placed him under the superintendence of the dairy-maid, who received strict orders to rear him with all due care and kindness. Bobby's orphan state interested every one in his favour; he was petted and indulged in every possible way; the natural consequence of which was, that, like other favourites, he began to presume on his preference; he became riotous and unmanageable, and did not scruple even to push at Molly if his breakfast was not ready at the usual time. When the weather became fine, Bobby was turned into the poultry yard; and as he had no companions there of his own race, he associated with a flock of geese, who good-naturedly permitted him to join their circle. As long as the geese remained on dry land, Bobby was in high good-humour, but when they took to the water, nothing could exceed his uneasiness and vexation; and he would run round and round the pond, bleating as if his heart would break; and he would welcome their return to land with as much transport as a sailor would show to a party of shipwrecked mariners.

In process of time, Bobby discovered that the old gander was the constant promoter and, in fact, the ringleader in all these water parties. This was more than Bobby could bear; and one day, when the unsuspecting gander was waddling towards the pond, the geese following him in Indian file, Bobby fell upon him with the utmost fury, and beat him so severely as soon to drive him from the field, and there is no saying what the consequences might have been, if the servants had not interfered in behalf of the poor bird.

This was Bobby's first duel, but by no means his last; for many desperate encounters took place. It was remarked that Bobby never molested the geese; the gander alone was the object of his fury, and then only at the time when, as Bobby imagined, he was leading his family to ruin and destruction. Bobby's feelings are not to be condemned, and we ought to pause before we blame his mode of showing them, knowing, as we all do, how many persons there are in the world who are insensible to every argument but the argument of blows.

A Spanish gentleman, residing in the island of Jersey, has a large dog, which has on many occasions shown great sagacity and other good qualities, of which I shall give a few examples. Jimbo has a strong regard for the children of his master; he never fails to attend them when they go from home, and he waits contentedly at the door of any house they may happen to visit till they come out. As Jimbo was considered to be a safe and trusty messenger, he was often employed to carry home the purchases made in the town of St Heller's by the family. One day his young master, having bought a dozen of eggs, put them into a small basket, which also contained a napkin, and desired Jimbo to carry them home. Jimbo set off on his mission, but meeting unfortunately with some other dogs, a violent battle took place, in which the eggs were demolished, and Jimbo arrived at home with the handle of the basket and a scrap of the nap-

kin in his teeth, and laid them down at the feet of Senora B., with a deprecating look. When young Senor B. returned, and was informed of what had happened, he immediately called the dog to him; and taking down a whip, he demanded to be shown what had become of the eggs that had been entrusted to his care. On this Jimbo instantly set off, and conducted his young master to the place of combat, where lay the remains of the eggs and the fragments of the basket. For this breach of discipline and betrayal of trust, Jimbo received a sound drubbing, which he bore with seeming patience; but from that day forward neither threats, blows, nor caresses, would ever induce Jimbo to make another marketing.

Having now related Jimbo's bad, I think it incumbent on me to display his good, qualities, remarking, by the way, that if this rule were observed in commenting on the errors of bipeds, there would be much less suffering in the world than there is at this moment: but let that pass, and return we to Jimbo, whose magnanimity to a fallen foe might redeem a much more serious error than that of the escapade I have just related. A Spanish gentleman, who visited the family of Senor B., had a large and surly ill-tempered dog, and Jimbo and he never encountered each other without having a regular fight. When this gentleman returned to Spain, finding it impossible to take the dog with him, he left him in the care of a gentleman with whom he was slightly acquainted, and who, having no desire to be troubled with such an ill-tempered animal, beat him out of doors; and he was found by one of Senor B.'s sons wandering in the streets of St Heller's, half dead with cold and hunger. Moved by compassion, the kind-hearted youth took him home, not, however, without certain misgivings as to the reception Jimbo was likely to meet on him. But what was the surprise of the family to see Jimbo, so far from assaulting his ancient enemy, go up to him and lick him gently; he then lay down close to him to bring him in warmth, and with his paws pushed the food to the starving animal, who was almost too feeble to walk to the spot where the servant had placed it.

Before leaving this subject, I shall relate an anecdote of another dog, which I heard from a Spanish gentleman, who knew Carlo's master, and who vouched for the truth of the following story:—A gentleman residing in Seville had a dog named Carlo, and a very knowing dog he was. His master, who had much confidence in his prudence and discretion, not only employed him to bring provisions from the market, but also entrusted him with money to pay for the various articles commissioned. For a long time Carlo conducted himself in the most irreproachable manner, carrying the billet and money to the butcher's, and conveying home a piece of beef or a fine fat pullet, as the case might be. Carlo continued to fill his situation in the commissariat to the entire satisfaction of the parties concerned; no fraud, no peculation, was ever laid to his charge; in short, Carlo showed by his daily conduct, that he not only knew the duties of a commissary, but what is still more remarkable, he actually practised them. But, alas! how many men in the midst of an honourable career may be tempted to make a false step—so it was with Carlo. Some shabby dog, it was supposed, had affronted him; he set down the basket, and, while engaged in chastising his foe, an urchin peeped into the basket, seized the piece of money, and directly made off, without waiting to congratulate the victor. Carlo having sufficiently punished his adversary, shook his ears, and, quite unconscious of the loss he had sustained, seized the basket with his teeth, trotted off to market in double quick time, and presented himself before the butcher. "How is this?—there is no money here, Carlo," said the butcher, after taking out the billet, and turning the basket upside down. For a few moments Carlo hung his head in evident confusion; and then, as if a sudden thought had struck him, he rushed out of the market. Away he went helter-skelter through the crowded streets, upsetting a gallego with his water jar, bouncing against a seller of watermelons, and running full tilt against an Italian pedlar, creating dire confusion among his saints and madonnas; on he went, till he reached the square where a number of boys were collected playing at pitch and toss. Here Carlo made a halt for a few minutes, until seeing a piece of money similar to the one that had been stolen from him, he pounced upon it and disappeared, to the great astonishment of its owner. Carlo went directly to the butcher, gave him the money, took up the well-filled basket, and, what is not the least remarkable part of the story, he returned home by a circuitous route, by which means he avoided passing through the square, having, doubtless, reasons of his own for declining a meeting with the young gambler.

It is probable that most of my readers are acquainted with the account given of the quarrel between two French ladies for precedence. Their carriages drove into one of the narrow streets of Paris, from opposite directions; consequently, it will require no great display of logic to prove that they met in the middle. The postilion of one carriage announced the rank of his mistress, and imperiously ordered his brother of the whip to clear the way. To this the other replied by vociferating the name of his mistress, a lady of equal rank with the occupant of the other carriage, and rising in his saddle, he vehemently declared that "in advance" was his motto, and that he would turn his

back on no one. This audacious speech roused the ire of the rival postilion, who seemed ready to jump out of his jack-boots from pure indignation. He retorted, the other replied; queues whisked, whips cracked, dogs yelled, horses plunged, and children screamed—but all to no purpose; neither of the disputants would yield; and in all probability the combatants would have bivouacked on the field, if the authorities had not interfered and put an end to the struggle.

This may seem rather an odd introduction to an incident connected with natural history, but a perusal of the following anecdote will throw some light on the subject, and prove to our entire satisfaction that animals also have their points of honour, and that they know and assert their rights touching precedence, with a pertinacity which would do honour to the most aristocratic dame in the land.

While on visit to a friend residing in Wiltshire, I happened one day to pass the farm-yard at the time the dairy-maid was driving in the cows. They were all safely housed but one, which appeared to be of a most obstreperous disposition. Go in to the cow-house she would not. She ran about the yard tossing her head and kicking up her heels, making a most tremendous uproar, and seeming to think herself an exceedingly ill-used animal. Sometimes she would approach the door, but on the slightest attempt to put her in, away she scoured, and the panting dairy-maid "toiled after her in vain."

In answer to my inquiries as to the cause of these vanaries, the dairy-maid said, "I know very well what she wants, but I hate to see such pride in a dumb brute." "Why, what does she want, my good girl?" "You must know," replied the much provoked dairy-maid, "that this cow seems in a manner to domineer over all the others; she always walks first; and if any of the other cows go into the cow-house before her, she is sure to kick up this riot. I know just as well as if she opened her mouth and told me, that she wants me to turn out the other cows; and you'll see I'll have to do it, or never a foot will she stir into the cow-house this blessed night." And so indeed it proved; for in despite of blows, caresses, and every stratagem that the unfortunate dairy-maid could think of, she continued careering about the yard, till, as a last resource, the dairy-maid turned out the other cows, on which this stickler for precedence walked majestically into the cow-house, and was immediately followed by her more meek and humble compatriots.

PLEASURE TOURS.

THE BANKS OF THE FORTH, AND STIRLING.

THIS being the stirring season of the year, let us say a few words upon what we consider as the most attractive scenery in Scotland for those who design to solace their wearied frames with a refreshing jaunt into the country. There is a great art in effecting a tour of pleasure and recreation. If a person do not be a little careful, he may throw himself away upon a dull region, interesting neither for its external character, nor for the associations connected with a former state of society.

Where are such scenes to be seen in more perfection than in Scotland?—as is every day testified by crowds coming from afar to obtain a glimpse of its oft-sung mountains, plains, streams, lakes, and ruined fortresses. Scotland, however, is not all a field of romance. There are now vast tracts within its boundaries so well cultivated and inclosed, and trimmed by every device of modern art, that the stranger may, as we say, throw himself away upon a scene of mere agricultural improvement—excellent, no doubt, in a political-economy point of view, but miserable for one who is looking out for lakes and waterfalls. Where, then, are we to find the "true jaunting scenery?" This is what we are now going to mention, for the purpose of preventing mistakes, and saving a world of money in purchasing tour-books.

The romantic, visit-worthy scenery of Scotland lies principally in the middle and western division of the country. The middle is that portion lying between the Firths of Forth and Tay on the east, and the Clyde and Argyleshire on the west, being partly lowland and partly highland in name and character. The western division is on the west coast of Argyleshire, and, extending easterly along the line of the Caledonian canal to Inverness, is altogether highland. Nineteenths of the jaunting is confined to the middle district in its widest sense. Within this division, three distinct tours may be performed; the first extending from the Forth to the Trossachs and Loch Katrine; the second including the Clyde below Glasgow, Loch Lomond, Glen Croe, Inverary, and some other scenery at the mouth of the Clyde; the third is inland, and is confined to the Clyde above Glasgow, with the falls on that river. It should be mentioned, however, that the whole three may be agreeably performed without doubling over the ground, there being such a com-

bination of water and land conveyances as to place tourists, particularly those who can walk a few miles, completely at their ease. A fourth tour, distinct from any of the above, may be performed from Edinburgh to Perth, by way of the Tay, and from thence onwards to Dunkeld or other scenes of beauty in Perthshire, both highland and lowland. In undertaking tours such as we allude to, a good deal depends on having a proper starting point, as well as a clear idea of what is wished to be seen.

Glasgow and Edinburgh are the two chief starting places; from either of these cities there are innumerable stage-coaches, canal-boats, and steam-vessels constantly plying, and inviting the tourist to take advantage of their accommodations. We love Glasgow above all the places in the world for its admirable arrangements in regard to jaunting. From its commodious quay, steam-vessels start daily and at all hours for all places within the scope of the Highland tour scenery. Leaving this qualification, however, as a matter for future observation, we wish to begin at the beginning, and go along with the stranger on the tour from Edinburgh to Loch Katrine, by way of Stirling.

Edinburgh, as is generally known, stands on a series of hilly grounds, which rise gradually from the southern shore of the Firth of Forth, its distance from which is about a mile and a half. The view from the eminences in Edinburgh across and along this inlet of the sea is usually considered to be remarkably fine, and such as to attract the attention of strangers. On the right, the Firth is seen widening till lost in the German Ocean; on the left it is observed to contract and disappear amidst the bosom of hills, having for their background some of the loftiest of the Highland mountains. The most pleasing route to the Trossachs is by way of this piece of water; and to its shore a number of vehicles are continually plying, particularly at such times as suit the sailing of the steam-boats to Stirling, which lies at the head of the navigation. If the traveller means to go no farther than Loch Katrine, he may take his luggage with him; but if he intends or be able to walk several miles over a bad mountain road (on which there are no conveyances) from Loch Katrine to Loch Lomond, and so save himself from turning back a great many miles, he should take nothing with him but what he can conveniently carry. We strongly recommend him to take only as much luggage as he can carry, and so go on from Loch Katrine to Loch Lomond and the rest of the Clyde scenery, which will save both time and expense.

The steam-boats from Edinburgh to Stirling generally leave Newhaven chain-pier, the port of Edinburgh for steamers, at hours from six till ten in the morning, and the fare is seldom more than two shillings. It is best to get away as soon as possible, for the sail occupies from five to six hours, and some time should, if possible, be spent at Stirling. If the weather be propitious, this forms one of the most agreeable sails which can be undertaken. The scenery on the Forth is not grand, but the grounds on either side rise to a moderate height, and are in many places richly clothed by plantations, and embellished with noblemen's and gentlemen's seats. On the south shore, the traveller will not fail to observe the woody pleasure-grounds and splendid mansions of the Earl of Rosebery and Hopetoun; on the north, he will be equally pleased with the domains and house of the Earl of Moray, and of Alloa House, the seat of the Earl of Mar, besides other places not less agreeably situated on the nearest rising grounds.

In passing up and down the Firth, the steam-boats stop at various places to land or take on board passengers. One of the chief of these stopping-places is Charleston, on the north side, the nearest port to Dunfermline. This ancient town is situated on a rising ground at the distance of three or four miles from the water's edge; and if the tourist has time to spare, and be curious in old ecclesiastical architecture, he may advantageously wend his way thither. Dunfermline was the place of residence of Malcolm Canmore, and Margaret of England, his queen, in the eleventh century, and it was from his court held here that the Anglo-Saxon usages and language spread over Scotland. The remains of an abbey originally founded by Margaret are still extant, and have become famed in recent times from having been discovered to be the burial-place of Robert Bruce. Dunfermline is now a busy seat of the Scottish linen manufacture. Near the little sea-port, at which passengers are put ashore for Dunfermline, and a short way west of the village of

North Queensferry, stands a tall ruined edifice, called Rosyth Castle, the base of which is washed by the waves of the sea at high water. There is something impressive, and even august, in the appearance of this ancient fortalice, deserted as it is, in these its days of ruin and decay, by every thing but the wild sea-bird and the timid sheep. It was in its days of pride the seat of that branch of the Stuart family from which Oliver Cromwell was descended, the posterity, namely, of Sir James Stuart, uncle to King Robert II. On a stone in the south side of the tower, near the ground, and where the dinner bell used to hang, is a quaint inscription, the words of which may be thus modernised:—

In due time, draw this cord, the bell to clink,
Whose merry voice warns to meat and drink.

Above the strait of Queensferry, the Firth assumes the appearance of an inland lake, which character it possesses as far up as the town of Alloa, a distance of twenty miles. After this, it closes in as a river, resembling the Thames above Westminster, and is confined to a serpentine channel through the midst of verdant meadows. It is worth any one's while to visit Stirling by water, merely to see the links or windings of the Forth. The water describes a long series of sweeps, which are all but formed into perfect circles; and in sailing along it, the stranger is puzzled and amused to the last degree by the variety of positions into which he is thrown in regard to the surrounding objects. In some instances, an artificial cut of twenty or thirty yards would save perhaps a couple of miles in the course of the stream.

Unless the tides serve, steam-vessels are unable to reach Stirling, in which case the passengers are transferred to a large row-boat, and by it landed at the town. Stirling is one of the most ancient of the Scottish burghs, and bears a striking resemblance, though a miniature one, to the old town of Edinburgh; each being built on the ridge and sides of a hill which rises gradually from the east, and presents an abrupt crag or rocky cliff towards the west; and each having a principal street on the surface of the ridge, the upper end of which opens upon a castle. While the situation of Stirling is thus one of the most pleasing and picturesque in the country, it is a place noted for its antiquities, and the historical associations connected with it. Throughout the period of the reign of the Stuarts, it was a favourite seat of royalty; and it figured in divers exploits of Wallace during the struggle for national independence. It was particularly favoured by the residence of James V., who was born and crowned in its castle, and who adorned it by the erection of the present palace. While this merry monarch resided in the castle, he frequently went forth in disguise, and his adventures on these occasions have furnished a theme for many amusing anecdotes.

Of the many historical incidents transacted in the castle, none so well illustrate the state of misrule in Scotland in early times as the assassination of the Earl of Douglas by James II. This monarch was so exceedingly annoyed through the whole of his reign by this too powerful family of nobles, which at one time had so nearly unsettled him from his throne, that in a fit of disgust he formed the resolution of retiring to the Continent. At length, a means of escape from the annoyance of the family arrived. William, Earl of Douglas, having entered into a league with the Earls of Crawford and Ross against their sovereign, James invited him to Stirling Castle, and endeavoured to persuade him to break the treasonable compact. The king led him out of his audience-chamber (now the drawing-room of the deputy-governor of the castle) into a small closet close beside it (now thrown into the drawing-room), and there proceeded to entreat that he would break the league: Douglas presumptuously refusing, James at last exclaimed in a rage, "Then, if you will not, I shall," and instantly plunged his dagger into the body of the obstinate noble. According to tradition, his body was thrown over the window of the closet into a retired courtyard behind, and there buried; in confirmation of which, the skeleton of an armed man was found in the ground at that place some years ago. Such is a tolerable sample of the deeds performed without semblance of law or justice in what are called "the good old times."

The most interesting object in or about Stirling is the castle, which consists of a number of buildings perched on the summit of the before-mentioned cliff, and surrounded by walls, bristling with a few useless cannon, and garrisoned with an useless body of soldiers. The principal building in the castle is the palace, a lofty erection, externally exhibiting many fine traces of sculpture, but, in the interior, adapted entirely to the purposes of a barracks. It is not any work of art, however, which will long engage attention. The eye turns from the dull vacant courts to the splendid scene which nature spreads out on all sides of the fort. The view from the battery at the north-east angle, is, without exception, in our opinion, the finest in Scotland. It is worth travelling a hundred miles to see. The prospect embraces both the lofty rugged grandeur of the Highlands, and the soft luxuriance of an Italian plain. While the western horizon is crowded with

the huge masses of Ben Lomond and Ben Ledi, and others scarcely less elevated, and while before the spectator, in the north, there rise to an inferior height various woody hills broken into precipitous cliffs, the scene on the east offers to the eye an extensive flat vale, bounded by the range of the Ochil hills on the north, and, on the south, by those rising grounds on a part of which was fought the battle of Bannockburn. In this direction, in a clear day, the pinnacles of Edinburgh may be seen rising over the shoulder of the Corstorphine hill. The view of the vale below is exceedingly beautiful. The river Forth, after passing beneath the bridge which here crosses it, winds, as has been described, in a singularly capricious serpentine course, forming a number of peninsulas, luxuriantly covered with vegetation, and here and there dotted with farm-houses and cottages. In the foreground, on one of these peninsulas, are observed the tall ruins of the ancient abbey of Cambuskenneth, once one of the principal religious houses in Scotland, and the place where James III. and his queen were interred.

The view from the south side of the castle is less extensive, but still possesses a number of interesting features. On the low ground in this direction lay the king's gardens, the present condition of which is now that of a desolate heath or marsh. It is yet possible, however, to trace on this wild spot the peculiar form into which the ground had been thrown by its royal proprietors. Immediately beneath the woody sloping bank of the esplanade in front of the castle, is the ancient place of tournament and games, still distinguishable by its raised tumuli. After examining the castle, and viewing this splendid panorama of hill and dale, wood and water, the visitor returns to the town to explore the objects it offers for his inspection. The interior and more ancient streets of Stirling present rather a mean appearance, being generally long, narrow, and containing many old-fashioned and decayed houses. It is nevertheless undergoing considerable improvements; it contains many excellent shops and several good inns; and the environs are now embellished with new streets and handsome villas. The municipal affairs are also now well managed, and, to the honour of the corporations, they a short time ago voluntarily abandoned their old exclusive privileges, so that any kind of trade may now be carried on in the place without let or hindrance. Such an instance of liberality on a great scale is so pleasing an indication of the improvement of society and the growing intelligence of the age, that we have thought it worthy of being made widely known. The principal manufacture carried on in this district of country is that of coarse woollens, such as plaids and tartans, which find a market in all parts of Britain.

If the tourist has a day or two to spare, he may make some most agreeable excursions in the neighbourhood of Stirling. Airthrie is a scattered village, situated about a mile north-west of the town, and is now the place of summer resort of certain classes of valetudinarians, who proceed thither to drink the waters of a powerful mineral spring. Visitants chiefly reside at Stirling, or at an adjacent rustic and picturesque village called the Bridge of Allan. Leaving this agreeable spot, the tourist may pay a visit to the ancient episcopal city of Dumblane, which occupies a delightful and somewhat elevated situation on the east bank of the river Allan. It may be easily reached by means of one-horse chaises, called *noddies*, from Stirling. Though entitled to be called a city, from having been the seat of a bishop, Dumblane is now only a large village, consisting of a single street of an old-fashioned character, with a few lanes. In recent years it has become a place of considerable resort in the summer months by persons intending to ruralise and take the benefit of a mineral well in the neighbourhood. The great object of attraction in Dumblane is what was once the cathedral of the bishop, the choir of which is now the parish church. The building exhibits many traces of fine architecture and carving. Within the parish of Dumblane, and at the north base of the Ochil hills, was fought the bloody but indecisive battle of Sheriff-moor in 1715, between the government forces under the Duke of Argyle, and the insurgent Jacobite army led on by the Earl of Mar.

It is worthy of remark, that Stirling is a kind of central point in what may be styled the battle-country of Scotland. The field of Bannockburn is, however, the chief object of curiosity to those interested in our national annals; and as it lies only about a couple of miles from Stirling in a south-easterly direction, it is very frequently visited by tourists. The field is an upland, lying betwixt the villages of Bannockburn and St Ninians, on the face of those long-descending braes which have a northern exposure to the Firth. The battle, which was fought betwixt the Scottish forces under Robert Bruce, and the English invaders under Edward II., as is well known, established the permanent independence of Scotland against the ambition of the English monarchy. About half a mile south from St Ninians, upon the top of an eminence called the Caledon hill, and close by the old road from Stirling to Kilsyth, is a large earth-fast granite, called the Bore-stone, having a hole or bora in the top, in which the Scottish king inserted his standard. This spot is, we believe, the object of an annual visit, on the anniversary of the battle, to one or more associations of patriotic individuals, who walk in procession thither—the preservation of feelings connected with historical events being

one of the prevailing traits of character of the people in the northern division of the island.

As the places we have mentioned either may or may not be visited, the tourist has an opportunity of staying at Stirling for a day, or of passing almost immediately onwards to the Trossachs, to which we shall conduct him in next paper.

RAILWAYS IN THE UNITED STATES.

[Condensed from the Statistical Work of Mr Pitkin, formerly mentioned.]

The enterprise of the North Americans is not more conspicuous in respect of the canals which have been formed, than for the railways which have been projected, and are either finished or now in the course of completion. Such indeed has been the mania for this kind of internal improvement, that between one and two hundred private companies have been incorporated, for this object, in different parts of the United States. It is not our intention (says Mr Pitkin), even were it in our power, to trace the various routes contemplated in these various acts of incorporation—many of them will, probably, never be commenced, or, if commenced, finished. In this, as well as in every thing else which is new, and connected with individual interest, fancied benefits outran sober calculations. We shall only notice, and that in a general way, some of the principal of those already completed, or in such progress as to insure their completion.

In New England (to begin at the north), a railway of three miles in extent was constructed at Quincy, in Massachusetts, in 1825 or 1826, at the expense of about D.11,000 (dollars) per mile, for the purpose of transporting the valuable granite of that town to tide water. Three railroads are now constructing from Boston: one to the manufacturing town of Lowell, a distance of about thirty miles; one to Worcester, about forty miles; and one, about the same distance, to Providence. These three roads, at an expense of about one million of dollars each, will be completed, in all probability, in 1835. From Providence, a railroad was commenced in 1833 to Stonington, in Connecticut, a distance of about forty-eight miles, the expense of which is estimated at about D.1,140,000.

In the state of New York, the Hudson and Mohawk, the Schenectady and Saratoga railroads, are well known—the former, about fifteen miles in length, has cost nearly D.1,000,000; and the latter, twenty-one miles long, will have only cost, including every thing, about D.297,000. A similar road has lately been established, and the stock taken up, from Troy to Saratoga, twenty-four miles, and which, it is said, will be finished in 1835, at an expense of D.300,000. A railroad from Harlaem to New York is nearly completed. Farther west in that state, a similar road is nearly finished, from Ithica, the head of the Cayuga Lake, to Owego, on the Susquehanna, twenty-nine miles, at an expense of about D.400,000; and a short road connecting Rochester with Lake Ontario.

The railroad between Schenectady and Utica was chartered in 1833, is now in progress, and will, no doubt, be completed as soon as a road of that length and magnitude can be done. Its length is seventy-seven and a half miles, and the estimated cost D.1,500,000.

The number of passengers on the Mohawk and Hudson road, in 1834, exceeded the number between New York and Philadelphia, on the Camden and Amboy road, more than thirty-three thousand, the number on the latter being only, as will be seen hereafter, one hundred and ten thousand. We would here observe, that the railroad from New York to Lake Erie, through Binghamton, so long in contemplation, has been lately accurately surveyed and pronounced practicable, to strike the lake somewhere between Dunkirk and Portland, a distance of four hundred and eighty-three miles, the expense, with a single track, being estimated at D.4,762,260.

The Camden and Amboy railroad, sixty-one miles in length, is now completed, and brings the cities of New York and Philadelphia into the vicinity of each other, the travel of five or six hours being only required from one city to the other. The cost of this road, including real estate, steam-boats connected with it, locomotive cars, wharves, &c. was about D.2,000,000. The number of passengers on this road, during the past season (1834), was one hundred and ten thousand, and the gross income said to be D.500,000. This road is connected with the Raritan and Delaware canal. A road from the manufacturing village of Paterson, to New York, about sixteen miles, is nearly finished, but at what expense, we have not ascertained. In addition to these, a road is now in progress, from Jersey City, through Newark and Elizabeth-town to Brunswick.

The railroads as well as the canals of Pennsylvania, exceed in number, extent, and expense, those of any other state. The Philadelphia and Columbia road, and the portage road, over the Alleghany, constitute a part, as before stated, of the great inland communication between the Delaware and Lake Erie, and were constructed at the expense of the state. The former is eighty-two miles in length, and the expense, when completed, will be about D.3,500,000, or more than D.4,000 per mile.

In crossing the Alleghany, the Pennsylvanians had to encounter difficulties, apparently insurmountable, as the New Yorkers had, in passing the rocky ridge

at Lockport. The portage railway across the Alleghany Mountains is certainly one of the boldest works of the kind undertaken and completed, in this or any other country. It is thirty-six miles in length, and in this distance overcomes a rise and fall of two thousand five hundred and seventy feet; and in one part of it has a tunnel of nine hundred feet cut through a solid rock; it has ten stationary steam-engines, and ten inclined planes, five on each side of the mountain; and the ropes alone, necessary on these inclined planes, would reach more than eleven miles, and their expense has been more than D.20,000—and what is still more singular, a rigger's loft has been erected for these ropes, on the summit of the mountain, where riggers are employed, at an annual expense of more than D.1600. The whole expense of this stupendous work will be about D.1,750,000.

In addition to the state railroads, many roads of this kind have been made and are now making in Pennsylvania, by companies and individuals, the most of which are connected with the coal mines, and have been constructed for the purpose of facilitating the transportation of coal from these mines to the canals or other water communications. The most considerable of these are the Philadelphia and Trenton, which will soon be completed; the Philadelphia and Germantown, the Little Schuylkill, Mine Hill and Schuylkill, Mount Carbon, Danville, and Pottsville, Schuylkill valley, Mauch Chunk, Room Run, West branch, Mill creek, Pine grove, Lykens valley, and Carbondale, and many collateral roads, connected with these at the mines. A lateral railroad is made from the state road to Columbia, about twenty miles from Philadelphia to West Chester, a distance of nine miles, at an expense of about D.100,000. About forty-five miles from Philadelphia, on the Columbia railroad, a road is located to Port Deposit, on the Susquehanna, through Oxford, a distance of about thirty-one miles, to meet a similar road from Baltimore. The whole extent of railroads in Pennsylvania, made by companies and individuals, is about three hundred miles.

The Newcastle and French Town railroad, sixteen miles in length, connects the Delaware River with the Chesapeake, in the state of Delaware. This road cost about D.400,000, and is one of the best in the United States.

The enterprising citizens of Baltimore, in 1826, perceiving that, in consequence of steam-navigation on the western waters, and the exertions of other states, they were losing the trade of the west, began seriously to consider of some mode of recovering it. A communication with the Ohio by a canal was first contemplated; but the report of the engineers sent out by the government of the United States, by which the cost of such a canal was estimated at more than twenty-two millions of dollars, induced them to substitute a railroad; and for this purpose, in February 1827, they obtained acts of incorporation from Maryland and Virginia. The company was authorized to strike the Ohio River at any place between Pittsburgh and the mouth of the Little Kanaway. The distance to Pittsburgh was about three hundred and thirty miles.

This was the most extensive, and, we may add, the boldest project of the kind ever undertaken by any government, or by individuals. The road contemplated was about four times the length of any similar one in Europe, and over ground much higher and more difficult than any other before occupied for such a road. But neither the boldness of the plan, nor the difficulties attending its execution, prevented an immediate subscription to the amount of D.4,000,000, towards carrying it into effect—the state of Maryland and the city of Baltimore each furnishing D.500,000 of this sum, and individuals the remainder.

The work was commenced on the 4th of July 1828, but was for a long time retarded by a dispute between the company and the Chesapeake and Ohio Canal Company, as to prior right of location in certain parts of the route. This dispute, however, has been adjusted, and on the 1st of December 1834, the road was finished to Harper's Ferry, so as to admit the passage of cars to that place, a distance of about eighty-two miles, and at an expense of towards D.3,000,000. At Harper's Ferry, this road meets another railroad from that place to Winchester, in Virginia, which is now in progress—from Winchester, it is calculated that a road will be continued to the Ohio, either at Parkersburg, by crossing the mountains from Winchester, or by ascending the valley of the Shenandoah, to Staunton, and then to Jennings gap, and the white sulphur springs, to Guyandotte.

The tolls collected on the Baltimore and Ohio railroad, from October 1st, 1833, to September 30th, 1834, was from tonnage and passengers, D.205,436; the expenses for the same period were D.132,862, leaving a revenue of D.72,574. The number of passengers on the road the same year, was ninety-four thousand eight hundred and forty-four, and the tonnage of articles fifty-six thousand one hundred and twenty-nine thousand nine hundred and twenty-eight going westwardly, and thirty-six thousand one hundred and ninety-one eastwardly.

The Baltimore and Ohio Railroad Company are now constructing a lateral railroad to the city of Washington, commencing about eight miles from Baltimore. It is about thirty-two miles in length, and will probably be completed in 1835. The expense of making it is estimated at D.1,500,000, and on the 1st of October 1834, about D.900,000 had been expended upon it.

To secure the trade of the Susquehanna, a railroad has been projected from Baltimore, to strike that river in Pennsylvania, by the way of York; but what progress has been made in it, we have not ascertained. The citizens of Baltimore had at various times expended many hundred thousand dollars in improving the navigation of the Susquehanna, lying within the limits of Maryland, by which they had enjoyed no small share of the trade of that river. This trade, however, they were losing, in consequence of the internal improvements of Pennsylvania, and of the Delaware and Chesapeake canal: and to regain it, this road was projected.

As we proceed south, we find that Virginia, also, has her railroads already in operation, and others in contemplation. In this state a railroad has been constructed from the tide waters on James' River, near Richmond, to the coal-mines in Chesterfield county, a distance of thirteen and a half miles. It was commenced in January 1830, and was in operation in July 1831; and was made for about D.8000 per mile, and has been very profitable to the stockholders.

A railroad from Petersburg to Weldon on the Roanoke, a distance of sixty miles, has been in operation for about two years. In November 1833, there had been expended upon it D.515,334, and its income for a year ending October 31st, 1833, was D.37,574. This road was calculated to divert a part of the trade of the river Roanoke from Norfolk to Petersburg. To prevent this, a similar road has been projected, and is now in progress, from Portsmouth to a place on the Roanoke, in North Carolina, opposite Weldon, a distance of seventy-seven miles; the estimated cost of which is only D.475,000. A company has also been lately chartered, to construct a railroad from Winchester to Harper's Ferry, to meet the road from Baltimore to that place, and which will soon be completed. Virginia has also long contemplated to secure a share of the western trade, by connecting James' River with the Ohio, by the way of the Great Kanaway. A company has been for some time formed to effect this great object, by connecting the rivers with canals or railroads. The expense has been estimated at somewhat more than D.8,000,000, but the whole stock, it is believed, has not yet been taken up.

South Carolina has already completed the longest railroad, now in operation, in any part of the world. It extends from Charleston to Hamburg, on the Savannah river, opposite to Augusta, a distance of one hundred and thirty-five and a quarter miles. It was commenced in 1830, and was opened for use throughout, in 1833. It is built on piles, and may be considered as a continuous bridge. Its original cost, including preliminary surveys, locomotive engines, cars, depositories, inclined planes, stationary engines, purchase of land, &c. was D.904,500. Where these piles are above the surface of the ground, it has been considered necessary to fill up the space with earth, and this has been partly done; and this, with other items, increased the cost of the road, up to October 31st, 1834, to D.1,336,615. The stock is considered valuable. From May to October 1834, a period of six months, the company received, for transportation of passengers and cotton on this road, D.83,445. The number of passengers, during this period, was thirteen thousand five hundred and seventy-five, paying D.35,140, and the quantity of cotton transported the same time, was twelve thousand seven hundred and fifty-six bales, and which paid D.47,304.

In Georgia, a company has been incorporated to make a road from Augusta to Athens, and we are informed that the stock has been taken up, the route surveyed, and will probably be made, and at an expense of about D.10,000 per mile. The distance is about one hundred and fourteen miles. This road is considered a continuation of the Charleston road, and naturally connected with it. From Athens, it is contemplated to extend it to Decatur on the Tennessee river, and thus, in this direction, connect the trade of the west with the city of Charleston.

In Alabama, a railroad round the Muscle shoals in the Tennessee river, was finished about the 1st of December 1834. It extends from Tuscaloosa, through Courtland to Decatur, a little more than forty-five miles; twenty-five of which was made in 1834. This road must be advantageous to a great extent of country adjoining the Tennessee river, above the Muscle shoals; as that river above these shoals is navigable for steam-boats as high up as Knoxville, a distance of about four hundred miles.

An important road of this character has been commenced in Kentucky, and will no doubt be soon completed. It extends from Lexington, through Frankfort, the seat of government, to Louisville, a distance of about ninety miles. The work upon it was commenced in April 1832, but during the summer of 1833 was suspended on account of the cholera. In September 1834, twenty-three miles were finished, and by the 1st of January following, it was completed and used to Frankfort, twenty-eight miles. The cost of this road, with a single track, was estimated at D.1,032,000; and its actual expense thus far has not much exceeded the estimate—the estimated cost to Frankfort being D.355,000, and the actual cost to that place about D.370,000. This road, we understand, has been built in a substantial manner.

Other roads of this kind have been contemplated and authorised, in the western states, and some of them will no doubt be long finished. The state of Indiana has lately authorised a loan of about a

million and a half to make similar roads in that state. In Louisiana, a railroad has been completed from New Orleans to Lake Ponchartrain, about six miles, at an expense, including machinery and real estate, of £443,443.

The railroads before noticed, which were completed on the 1st of January 1835, or would not long after be completed, are in length, taken together, about sixteen hundred miles, and their cost not far from £30,000,000. The aggregate length of those in Pennsylvania is about four hundred and eighteen miles, made at an expense estimated to exceed £7,000,000. When the cost of the railroads in the United States is added to that of the canals, it will be found that there has been or will soon be expended in this country, on these two kinds of internal improvement, a sum not less than about £94,000,000; and this has been done principally since 1817.

In reviewing the foregoing brief account of the canals and railroads of the United States, it will be perceived that the two principal objects originally contemplated in making them, have in a great measure been accomplished. A safe internal water communication, along or near the Atlantic sea board, has been completed—large vessels can now go from the Hudson to the Delaware, through the Raritan and Delaware canal, from thence through the Delaware and Chesapeake canal, and Chesapeake bay, to Norfolk in Virginia, and from Norfolk, through the Dismal Swamp canal, to Albemarle sound in North Carolina. The eastern and western waters are now connected, not only from the Hudson to Lake Erie, through the State of New York, but also from the Delaware to the Ohio, and to the same lake, through Pennsylvania. This has greatly facilitated the intercourse between the east and the west, to the immense advantage of both, and has bound them together by ties, which we trust can never be broken. In addition to this evidence of the great and growing wealth and resources of this country, it will be remembered, that the United States, during the same period, have paid off a national debt of more than £120,000,000.

JOKES.

[From the "Laird of Logan, or Wit of the West," recently published.]

CAN SHE SPIN?—A young girl was presented to James L. as an English prodigy, because she was deeply learned. The person who introduced her boasted of her proficiency in ancient languages. "I can assure your majesty," said he, "that she can both speak and write Latin, Greek, and Hebrew." "These are rare attainments for a damsels," said James; "but pray, tell me, can she spin?"

THE INGENUITY OF A BEGGAR BOY.—A beggar boy made application to a farmer's wife for relief, and was refused; on which the boy, with an arch look, informed the good dame that he would, if she gave him a slice of bread and cheese, put her in possession of a secret which would be of service to her all the days of her life; the boon was granted, and the boy, agreeably to his word, remarked, "If you knit a knot at the end of your thread, you will never lose your first stitch."

COMING TO CLOSE QUARTERS.—An old woman to whom an unfortunate son of poverty was owing a small account, had repeatedly called for payment, but the answer to her inquiry invariably turned up, the usual retort when a debtor wishes gently to cut a troublesome creditor, "Not at home!" Having once or twice dogged her neighbour, and knocked at the door which his coat-tails had not a moment before swept in passing in, and receiving still the chilling reply, "Not at home," she determined to come to closer quarters when she next got scent of him. An opportunity soon occurred, for when an eagle eye is on the watch, nothing escapes it; the unfortunate debtor passed her windows, and she bolted out in pursuit. Step by step she dogged him to his door—he rang the bell—his impudent friend was at his back; the door opened, and catching her opportunity before he disappeared, she rapped sharply with her knuckles on his back; he wheeled round. "Weel, is Tammas Williamson in noo?" said she, staring him in the face. The appeal went home, and the money was instantly tabled.

HONESTY REWARDED.—About the end of harvest, a cow-herd, in the neighbourhood of Dundee, in throwing a stone at one of his master's cows in an out-field, unfortunately broke one of her legs. Scratching his curly head, the rustic began to think seriously about what he should say to his master. After musing for some time, his countenance began to brighten, and he observed, loud enough to be heard, "Fegs, I'll just say she took the rig, and got it jumpin' the stile to the stocks." On farther reflection, however, his conscience began to remonstrate with him on the inappropriateness of telling a lie; and at last he murmured, "Weel, I'll tell the truth, gif I should lose my place and fee." "Yes, callant," said his master, who had heard the colloquy, "that's the best plan, and for your honesty you shall be forgiven."

A HIGHLAND PLEDGE.—An aspirant after parliamentary honours, in one of the Highland burghs, was thus interrogated by a kilted elector:—"Whether or not are you prepared to bring a bill into parliament when you go there, obliging every man or woman who keeps a public-house to sell the gill of the best whisky, ~~max~~ measure, at the old price?"

A HINT TO WIVES.—"If I'm not home from the party to-night at ten o'clock," said a husband to his better and bigger half, "don't wait for me." "That I won't," said the lady, significantly—"I won't wait, but I'll come for you." He returned at ten precisely.

TAKING THINGS COOLLY.—Some time ago, a young farmer left a market town, situated no matter where, and proceeded homewards, mounted on a nag of which he has often boasted, as Tam O'Shanter did of his mare, that "a better never lifted leg." The season was winter, and the night very dark; and from some cause or other the animal deviated from the proper path, stumbled over a crag, and broke its neck; although the rider, strange to say, escaped unhurt, or, at worst, with a few trifling scratches. The youth journeyed home on foot, told the servants what had happened, and directed one of them to proceed to the spot next day, for the purpose of flaying the horse, and bringing away the skin and shoes. The lad of course obeyed his instructions, and was busily engaged, when his senior master, who had also been at market, but who preferred travelling in day-light, passed the spot, and on hearing some noise, paused, and looked into the ravine below. On recognising through the branches one of his own men, he called out, "Is that you, Benjie?" "Ay, it's just me, maister." "An' what are you doing there?" "Ou, just skinnin' the pony, sir." "What pony?" "Maister George's, that tumbled down last night, and broke its neck." "Ay, indeed! and can ye tell me wha's skinnin' George?"

THE FOUNTAIN,

A CONVERSATION.

[From Wordsworth's Poems.]

We talked with open heart, and tongue
Affectionate and true,
A pair of Friends, though I was young,
And Matthew seventy-two.

We lay beneath a spreading oak,
Beside a mossy seat;
And from the turf a fountain broke,
And gurgled at our feet.

"Now, Matthew!" said I, "let us match
This water's pleasant tune
With some old Border-Song, or Catch,
That suits a summer's noon.

Or of the Church-clock and the chimes
Sing here beneath the shade,
That half-mad thing of witty rhymes
Which you last April made!"

In silence Matthew lay, and eyed
The spring beneath the tree;
And thus the dear old man replied,
The gray-haired man of glee:

"Down to the vale this water steers,
How merrily it goes!
'Twill murmur on a thousand years,
And flow as now it flows.

And here on this delightful day,
I cannot choose but think
How oft, a vigorous man, I lay
Beside this Fountain's brink.

My eyes are dim with childish tears,
My heart is idly stirred,
For the same sound is in my ears
Which in those days I heard.

Thus fares it still in our decay:
And yet the wiser mind
Mourns less for what age takes away
Than what it leaves behind.

The Blackbird in the summer trees,
The Lark upon the hill,
Let loose their carols when they please,
Are quiet when they will.

With nature never do they wage
A foolish strife; they see
A happy youth and their old age
Is beautiful and free:

But we are pressed by heavy laws;
And often, glad no more,
We wear a face of joy, because
We have been glad of yore.

If there is one who need bemoan
His kindred laid in earth,
The household hearts that were his own,
It is the man of mirth.

My days, my Friend, are almost gone,
My life has been approved,
And many love me; but by none
Am I enough beloved."

"Now both himself and me be wrongs,
The man who thus complains!
I live and sing my idle songs
Upon these happy plains,

And, Matthew, for thy children dead
I'll be a son to thee!"
At this he grasped my hand, and said,
"Alas! that cannot be."

We rose up from the fountain-side;
And down the smooth descent
Of the green sheep-track did we glide;
And through the wood we went;

And, ere we came to Leonard's Rock,
He sang those witty rhymes
About the crazy old church-clock,
And the bewildered chimes.

WHAT DRAM-DRINKING IS DOING.

CAPITAL punishments have of late years been uncommon in Scotland except in cases of murder, and it is exceedingly worthy of notice, that few murders are now perpetrated in the country from any other cause than drunkenness. It is still more lamentable to remark, that the murderers are generally of husbands by their wives, and of wives by their husbands. It would appear that, in all such cases, the unhappy murderers have been roused to a state of ungovernable fury from the conduct of their partners in life, and the utter hopelessness of relief from their misery. The demoralised condition of the lower order of females in particular, in large towns, purely from the practice of dram-drinking, is becoming daily more distressing; and if no remedy interpose, we may rationally anticipate that murders will go on rapidly increasing—for the fear of public execution has no influence whatever in arresting the progress of crime. There is a law in one of the American states, Ohio we believe, by which confirmed drunkenness forms a plea for divorce, which must save many lives, and not a little domestic misery. In some of the northern countries of Europe, there are also regulations of a peculiar nature relative to drunkenness, which our legislators might find advantageous to examine. In Sweden, as we learn from Schubert, in his Travels, the laws for punishing intemperance are very rigorous. "The laws against intoxication (says he) are enforced with great rigour in Sweden. Whoever is seen drunk, is fined, for the first offence, three dollars; for the second, six; for the third and fourth, a still larger sum, and is also deprived of the right of voting at elections, and of being appointed a representative. He is, besides, publicly exposed in the parish church on the following Sunday. If the same individual is found committing the same offence a fifth time, he is shut up in a house of correction, and condemned to six months' hard labour; and if he is again guilty, of a twelvemonth's punishment of a similar description. If the offence has been committed in public, such as at a fair, an auction, &c., the fine is doubled; and if the offender has made his appearance in a church, the punishment is still more severe. Whoever is convicted of having induced another to intoxicate himself, is fined three dollars, which sum is doubled if the person is a minor. An ecclesiastic who falls into this offence loses his benefice: if it is a layman who occupies any considerable post, his functions are suspended, and perhaps he is dismissed. Drunkenness is never admitted as an excuse for any crime; and whoever dies when drunk is buried ignominiously, and deprived of the prayers of the church. It is forbidden to give, and more explicitly to sell, any spirituous liquors to students, workmen, servants, apprentices, and private soldiers. Whoever is observed drunk in the streets, or making a noise in a tavern, is sure to be taken to prison and detained till sober, without, however, being on that account exempted from the fines. Half of these fines goes to the informers (who are generally police officers), the other half to the poor. If the delinquent has no money, he is kept in prison until some one pays for him, or until he has worked out his enlargement. Twice a-year these ordinances are read aloud from the pulpit by the clergy; and every tavern-keeper is bound, under the penalty of a heavy fine, to have a copy of them hung up in the principal rooms of his house."

MAKING COFFEE.—In making coffee, much care is requisite to extract the whole strength and flavour of the berry; and, moreover, it is very erroneous and most expensive to sweeten it with moist or raw sugar. Many persons imagine that the moist sugar tends more to sweeten; but if experiment be made, it will be found that half the quantity in weight of refined sugar will add more sweetness, and the flavour of the coffee will be much more pure and delicate. In Holland, where coffee is the universal beverage of the lower classes, the sugar cannot be too refined, and the boatmen on the canals may be seen mixing the most beautiful white refined sugar with their coffee; while on such their custom and taste they pride themselves highly. It requires but little thought to acquiesce in this departure from our custom, and when economy is blended with such judgment, it is only necessary to call the attention of those whose means naturally excite them to seek for facts combining what is cheap and what is best. The first mention of coffee in the west of Europe is by Ramsolf, a German traveller, who returned from Syria in 1573. It was first brought into England by Mr Nathaniel Conopius, a Cretan, who made it his common beverage, at Baliol College, Oxford, in 1641. Coffee trees were conveyed from Mocha to Holland in 1626, and carried to the West Indies in the year 1726; first cultivated at Surinam by the Dutch, 1718; its culture encouraged in the plantations, 1732.—*Mirror.*

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